

## PATENT SPECIFICATION



Application Date: Nov. 19, 1920. No. 32,655/20.

175,742

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## PROVISIONAL SPECIFICATION.

Improvements in and relating to Seats and Auxiliary Seats for the  
Side-cars of Motor Cycles and the like.

I, RONALD KINGSLEY READ, of The Stanford Sidecar Co., of Sampson Road, North, Birmingham, in the County of Warwick, a British subject, do hereby declare the nature of this invention to be as follows:—

My invention relates to side-cars for motor cycles and like road vehicles and consists of the improvements in or additions hereinafter described to the said side-cars whereby an auxiliary seat may be provided when desired in the side car, the said seat being capable of being readily fitted up in position for use and as readily dismantled when not required.

According to my invention the seat, which may consist of a rigid and preferably upholstered back and spring slung or supported leather, canvas or like seat is arranged, when in use, in the space in the side-car body in front of the ordinary seat.

The back of the seat is supported by a rod preferably made in two parts for the purpose hereinafter described the said rod passing through and having a sliding fit in a tubular guide or bearing or one of a pair of tubular guides or bearings provided on the seat back and either of which may be used when the seat is in use as the guide or bearing for the supporting rod. The outer ends of the said rod are cranked to fit into tubular sockets or the like mounted on the pillars of the car frame or other convenient part of the body above the front edge of the ordinary seat.

The back edge of the leather, canvas or like sheet constituting the seat proper is preferably attached to the lower edge of the back rest by coiled or other springs and the front end of the said seat proper is detachably connected preferably by

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coiled or other springs, which may have an adjustable connection, to eyes, hooks or the like carried by brackets or fixing plates attached to the vertical pillars or other convenient part of the frame-work on which the front end of the side-car body is supported.

As before stated the back supporting bar is preferably made in two parts or halves which construction permits the presented ends occupying the tubular guide or bearing on the seat back to be telescoped into or out of the said guide or bearing thereby enabling the seat to be fitted to side-car bodies of varying width. Further the said construction provides for the complete removal of one of the parts and its transference to a second and similar tubular guide or carrier on the seat back when the seat is not required for use and is dismantled or unshipped for being stowed away in any convenient place provided for its reception, one part or half of the supporting bar being telescoped into one tubular guide or carrier and the other part or half into the other guide or carrier and their cranked ends thus brought within the compass of the back of the seat against which the said cranked ends are turned and to which they are preferably clipped by suitable clips provided for the purpose.

The leather, canvas or like sheet constituting the seat proper is when not in use folded against the back or rest and its springs may be connected to hooks or eyes provided on the back or rear side of the seat back or rest.

I wish it to be understood that I do not limit myself to the precise construction and arrangement of the parts described as the same may be varied

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without departing from the nature of my invention. For example, instead of employing a rigid or stiff rest or back to the seat I may provide a leather, canvas or like back and the back rest and seat may, if desired, be formed from a single continuous sheet of canvas or like flexible

material as in the case of an ordinary folding canvas garden seat.

Dated this 18th day of November, 1920. 10

GEORGE SHAW & Co.,  
35, Temple Row, Birmingham,  
Chartered Patent Agents.

### COMPLETE SPECIFICATION.

#### Improvements in and relating to Seats and Auxiliary Seats for the Side-cars of Motor Cycles and the like.

I, RONALD KINGSLEY READ, of The  
15 Stanford Sidecar Co., of Sampson Road  
North, Birmingham, in the County of  
Warwick a British subject, do hereby  
declare the nature of this invention  
and in what manner the same is to be  
20 performed, to be particularly described  
and ascertained in and by the following  
statement:—

My invention relates to seats and/or  
auxiliary seats for the side-cars of motor  
25 cycles and the like and in order that my  
invention may be the better understood  
I remark that it has been heretofore pro-  
posed to provide an additional seat to be  
arranged in front of an upholstered seat  
30 in a side-car body and capable of being  
folded and stowed away when not required  
for use, and further it has been proposed  
to provide seats for side cars comprising  
a flexible seat proper of canvas or the like  
35 attached to front and back rails the back  
rail being supported on pivoted adjust-  
able side bars, auxiliary rails supported  
by plate springs attached to the front and  
back rails being provided intermediate  
40 the said front and back rails.

My invention consists of the new or  
improved constructions and arrangements  
or combinations of the said seats and  
supporting means therefor, hereinafter  
45 described and having for their principal  
objects to render the said seats capable  
of being very readily fitted in position  
for use and as readily detached when not  
required, to facilitate the exit and entry  
50 of passengers to and from the side-car  
or the like, and to permit, the use where  
a back supporting rod in two parts as  
hereinafter described is employed the use  
of the seats in side-car bodies of varying  
55 widths and further to provide if desired  
a rigid or stiff back portion to the seat  
in combination with a spring slung  
flexible leather, canvas or like seat  
proper.

60 According to the preferred construc-

tion and arrangement of my invention  
the said seat comprises a rigid and pre-  
ferably upholstered back having secured  
thereto a leather, canvas or like flexible  
65 seat proper, the back of the seat being  
supported by a rod preferably made in  
two parts for the purpose hereinafter  
described the said rod passing through  
and having a sliding fit in a tubular  
70 guide or bearing or one of a pair of  
tubular guides or bearings provided on  
the seat back and either of which may  
be used when the seat is in use as the  
guide or bearing for the supporting rod.  
75 The outer ends of the said rod are cranked  
to fit into tubular sockets or the like  
mounted on the pillars of the car frame  
or other convenient part of the body  
above or adjacent the front edge of the  
80 ordinary seat.

The back edge of the leather, canvas  
or like sheet constituting the seat proper  
is attached to the lower edge of the back  
rest by coiled or other springs and the  
85 front end of the said seat proper is  
detachably connected by coiled or other  
springs which may have an adjustable  
connection to eyes, hooks or the like  
carried by brackets or fixing plates  
90 attached to the vertical pillars or other  
convenient part of the frame-work on  
which the front end of the side-car body  
is supported; or the said front edge may  
be otherwise supported as hereinafter  
95 described.

As before stated the back supporting  
bar is preferably made in two parts or  
halves which construction permits the  
presented ends occupying the tubular  
100 guide or bearing on the seat back to be  
telescoped into or out of the said guide  
or bearing thereby enabling the seat to  
be fitted to side-car bodies of varying  
width. Further the said construction  
105 provides for the complete removal of one  
of the parts and its transference to a  
second and similar tubular guide or

carrier on the seat back when the seat is not required for use and is dismantled or unshipped for being stowed away in any convenient place provided for its reception, one part or half of the supporting bar being telescoped into one tubular guide or carrier and the other part or half into the other guide or carrier and their cranked ends thus brought within the compass of the back of the seat against which the said cranked ends are turned and to which they are preferably clipped by suitable clips provided for the purpose.

The leather, canvas or like sheet constituting the seat proper is, when not in use, folded against the back or rest and its springs may be connected to hooks or eyes provided on the back or rear side of the seat back or rest.

In cases where the side-car body is without an ordinary upholstered fixed seat two or more spring suspended seats in accordance with my invention may be arranged in line, that is to say, one behind the other and at a convenient distance apart in the body of the side-car.

I will further describe my invention in connection with the accompanying drawings, as applied to an auxiliary seat for a side-car body.

Figure 1 represents in perspective so much of a side-car body as is necessary to the understanding of the application of my invention portions of the body being broken away the better to display the auxiliary seat suspended therein and,

Figure 2 is a back elevation of the suspended auxiliary seat the portions of the side-car body to which the supporting or suspending sockets and lugs or the like are secured being indicated in dotted lines only in the said Figure 2.

Figure 3 is a side elevation of the auxiliary seat detached but with its parts shown in the relative positions which they occupy when the seat is suspended and Figure 4 is a back elevation of the said seat detached and with the parts thereof arranged as is hereinafter more fully described ready to be folded as shown in the end elevation Figure 5 for convenience of transit or storage.

In the said Figures 1 to 5, both inclusive, the auxiliary seat is of the preferred construction but the shape or formation of the seat and of the parts supporting the same are susceptible to considerable variation, examples of which are herein after particularly referred to in connection with the other figures of the drawing.

The same letters of reference indicate

the same or corresponding parts in the several figures of the drawing.

I will first describe the arrangement represented in Figures 1 to 5, both inclusive, of the drawing.

*a* is the side-car body and *b* is the usual fixed seat in front of which, where the said fixed seat *b* is provided, the auxiliary seat is suspended.

The said auxiliary seat according to the preferred form or construction comprises a stiff back portion *c* which may be padded on the front side for the greater comfort of the occupant of the seat, and a seat portion *c'* of leather canvas or like flexible and durable fabric or material.

The leather, canvas or other seat proper *c'* is preferably connected to the rigid back *c* by coiled springs *c<sup>2</sup>*, *c<sup>2</sup>* but other elastic or resilient connection such for example as strong elastic cord may be substituted for the said coiled springs or the rear edge of the seat proper *c'* may be attached directly to the lower edge of the rigid back without the interposition of springs or the like.

When coiled springs or elastic cord or cords are provided a leather or other flexible flap *c<sup>3</sup>* is preferably arranged to depend from the lower edge of the rigid back so as to constitute a cover over the front of the coiled springs or the like thus obviating the possibility of the passenger's garments being soiled or worn by rubbing contact with the springs or the like.

*d*, *d<sup>1</sup>* are the two rods provided to constitute a support for the back *c* of the seat each rod having a cranked portion capable of fitting in vertical sockets *e*, *e* secured to the uprights *f* of the side-car frame.

The other or uncranked ends of the rods *d*, *d<sup>1</sup>* when the said rods are in the seat supporting positions fit and slide telescopically in one or other, preferably the lower, of the two tubular sockets or guide *g*, *g<sup>1</sup>* secured on the rear side of the seat back *c* and when the said rods are thus arranged in the said socket or guide their presented socket engaging ends can be moved into and out of the socket to any desired extent thus permitting adjustment of the back support to suit any width of side-car body.

The manner in which the rods *d*, *d<sup>1</sup>* when in their supporting position are fitted into one of the sockets or tubular guides will be best understood by an examination of Figure 2, where the said rods are shown in their seat back supporting position in the lower socket *g<sup>1</sup>*.

The sockets *e*, *e* and *g*, *g<sup>1</sup>* may be

obtained from cut-off lengths of extruded bar or bent strip metal having one or other of the cross sectional forms shown in Figures 6 and 7, which are drawn to a larger scale than the other figures of the drawing, but instead of providing continuous tubular sockets, rings such as the screw ring shown in Figure 8 may be substituted therefor, two or a series of the said rings being arranged axially in line and serving the purpose of the continuous sockets.

Although I have shown the sockets  $e, e$  arranged on the vertical parts  $f$  of the side-car frame they may be otherwise arranged as for example horizontally on the top horizontal rails of the frame the forward pull on the seat back when the seat is occupied being sufficient to retain the cranked ends of the rods  $d, d^1$  in place in such horizontal sockets.

The front ends or corners of the seat proper  $c^1$  are connected by coiled springs  $h, h$  to perforated lugs or eyes  $i$  attached by fixing plates  $i^1$  to the vertical posts or uprights  $k$  of the nose bridge of the side-car frame but the said springs may be otherwise anchored and instead of the coiled springs  $h, h$  other spring or resilient connection of the front end or corners of the seat  $c^1$  may be provided such for example as elastic cord loops passed through the perforated lugs or eyes  $i$  and eyeletted holes  $m$  in the seat corners or an elastic cord passing through a hem along the front edge of the seat and looped at its ends for attachment to hooks on the frame.

When the passenger who occupies the auxiliary seat wishes to get out it is only necessary to unhitch the front spring connection at the door side of the body when the released corner drops clear, and when the passenger occupying the rear or fixed seat  $b$  desires to leave the side-car the auxiliary seat and its supports can be readily removed from obstructing the exit by sliding the seat back  $c$  laterally in the direction of the arrow in Figure 1 that is away from the door and on to the rod  $d$  until the end of the rod  $d^1$  is disengaged from the socket  $g^1$  when the rod  $d$  carrying the seat back therewith can be turned forwardly and the rod  $d^1$  turned rearwardly the obstruction of the seat and its supports being thus removed without entirely unshipping the same.

When the auxiliary seat is not required it can be entirely and readily unshipped or detached from its supports or connections with the body and when so detached the rods  $d, d^1$  are or may, for convenience of transit or storage, and to prevent the

mislaying of the said loose parts, be arranged one in each of the tubular sockets  $g, g^1$  on the rear of the seat back  $c$  as is illustrated in Figure 4 the cranked ends of the said rods being turned against the said back and held in position by spring clips  $n, n$  provided for their reception. The flexible seat proper  $c^1$  is then folded on to the back  $c$  as represented in Figure 5 and retained in the folded position by engagement of the hooked ends of the coiled springs  $h, h$  with eyes, hooks or loops  $o, o$  near the top corner of the rear side of the seat back.

The lower part of the seat back  $c$  and the part of the seat adjoining the same are preferably made of reduced width, that is to say, the junction of the back and the seat proper is formed with a waist which formation affords room for the accommodation of the legs of the passenger occupying the rear seat.

I wish it to be understood that I do not limit myself to the precise construction and arrangement of the parts described as the same may be varied without departing from the nature of my invention. For example, instead of employing a rigid or stiff rest or back to the seat I may provide a leather, canvas or like back and the back rest and seat may if desired be formed from a single continuous sheet of canvas or like flexible material as has been heretofore proposed in connection with side-car seats.

This modification is represented in Figure 9 of the accompanying drawing from an examination of which it will be seen that the upper edge of the canvas or like sheet which constitutes the seat is provided with a hem containing a tubular rod  $g^2$  to form a socket in which the inner ends of the supporting rods  $d, d^1$  have a telescopic sliding motion as in the first described arrangement. The lower end corners of the sheet have coiled suspension springs  $h, h$  or the said lower ends may have an elastic cord suspension as hereinbefore described.

In some cases according to the build of side-car body it may be necessary for the purpose of giving increased height to the seat back to lengthen the cranked outer ends of the rods  $d, d^1$  and to provide thereon a stop or collar  $d^2$  as shown in the detached view Figure 10 of a rod so modified the socket being indicated in dotted lines.

Further it may be necessary or desirable to carry the rigid support for the seat either nearer to the front or to the rear than the supporting position provided by the simple cranked rod already

described and for this purpose I provide rods having the double cranked form indicated in Figure 11 which shows detached a supporting rod or bar the socket fitting part of which joins the seat supporting part by a crank arm or branch  $d^3$ . By arranging the said part  $d^3$  to project either forwardly or rearwardly the position of the seat back is regulated accordingly. Or the said effect may be obtained by the provision of a curved portion or bend in the rod or bar as illustrated in Figure 12 in which case the bar has thereon a stop or collar  $d^2$  to limit the descent of the part of the rod which engages the socket  $e$  indicated in dotted lines in the said Figure 12.

In cases where it is inconvenient or practically impossible to connect or anchor the spring means by which the front corners of the seat are suspended to a part of the body or frame of the side car I provide the rods  $d$ ,  $d^1$  which rigidly support the back  $c$  with forwardly extending arms or parts  $d^5$ ,  $d^5$  as in the arrangement represented in Figure 13 the spring suspension of the seat being from the front ends of the said arms instead of from the body of the car.

In this arrangement I have represented a rigid back and flexible seat without the intermediate springs  $c^2$ ,  $c^2$ .

When the side-car body is without the fixed seat  $b$  I may arrange therein and tandem-wise, that is to say, one behind the other two or more spring slung readily detachable seats such as are hereinbefore described.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. The addition to or combination with a side-car for motor cycles and the like of a seat (or seats) the back or upper end or part of which is rigidly supported by a cross rod preferably in two parts as and for the purpose described, the ends of the said cross rod having a readily attachable and detachable connection with sockets or the like on the side-car body or frame, the front edge of the seat proper having a coiled spring or other flexible connection with the frame or other convenient part

of the side-car body, a spring slung and readily attachable and detachable seat being thereby provided.

2. In seats for the side-cars of motor cycles and the like as claimed in the prior claim—supporting means which permit the said seat to be partially detached and turned into a non-obstructing position when desired.

3. A spring slung seat for the side-cars of motor cycles and the like as claimed in Claim 1, provided with means for rigidly supporting the back of the seat or rear upper end thereof said means being capable of adjustment to permit the seats to be adapted to side-car bodies of varying width.

4. In spring slung seats for the side-cars of motor cycles and the like as claimed in Claim 1,—the provision on a back for the seat of a tubular guide or tubular guides and the combination therewith of telescopic rods cranked for engagement with sockets or the like fixed on the side-car body.

5. In spring slung seats for the side-cars of motor cycles and the like as claimed in the prior claims—forming at or about the junction of the seat proper and the back a narrow portion or waist as and for the purpose hereinbefore described.

6. The new or improved seat for spring suspension in the side-cars of motor cycles and the like hereinbefore described and illustrated in Figures 1 to 5, both inclusive, of the accompanying drawing.

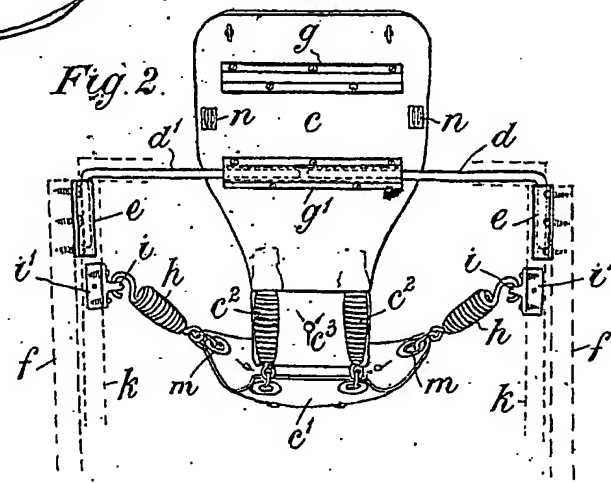
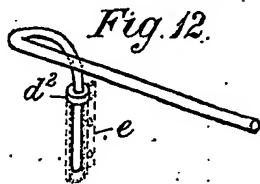
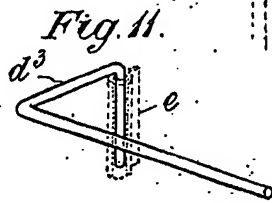
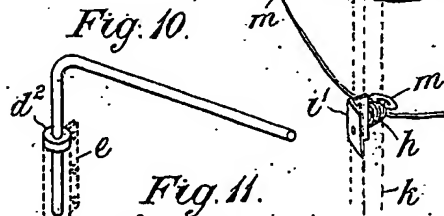
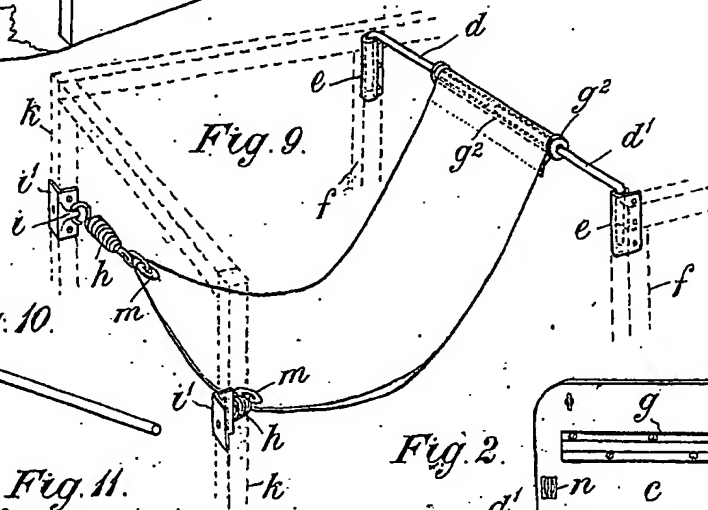
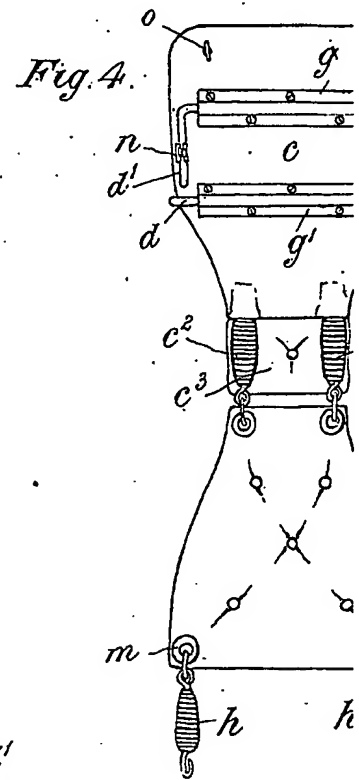
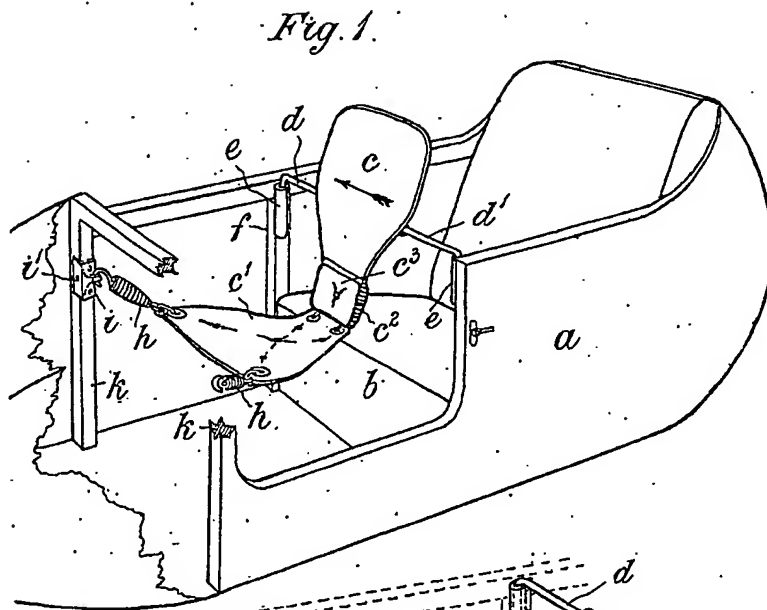
7. The modified construction of spring slung seat for the side-cars of motor cycles and the like hereinbefore described and illustrated in Figure 9 of the accompanying drawing.

8. The modified construction of spring slung seat for the side-cars of motor cycles and the like wherein the front ends of the seat proper are spring connected with extensions or arms of the supporting rods or bars of the seat instead of with the body or frame of the side-car substantially as described with reference to Figure 13 of the accompanying drawing.

Dated this 18th day of August, 1921.

GEORGE SHAW & Co.,  
35, Temple Row, Birmingham,  
Chartered Patent Agents.

[This Drawing is a reproduction of the Original on a reduced scale.]



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